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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,727	07/24/2003	Shinichiro Akieda	1713.1007	8052

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EXAMINER

ROJAS, BERNARD

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/625,727

Applicant(s)

AKIEDA ET AL.

Examiner

Bernard Rojas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 8-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 7, 32 and 33 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07242003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 5 and 8-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/09/2004.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the coils being are arranged in a flat form and a moving member that connects to magnets that face the coils must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 6, 7, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soma [US 5,327,162] in view of Watanabe et al. [US 6,816,049]

Claim 1, Soma discloses an actuator with a moving member [31] with a first holding member [23] that holds the moving member in such a manner that the moving member can slide within a predetermined range; and a second holding [24] member that holds the first holding member in such a manner that the first holding member can slide within another predetermined range in a direction perpendicular to the sliding direction of the moving member.

Soma fails to teach that the actuator uses a magnetic means to relay its position.

Watanabe et al. discloses a magnetic actuator with magnets [10] that are arranged in a flat form; coils [12] that face the magnets; a moving member [70, 71] that is connected to the coils in which the actuator moving the coils against the magnets.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the magnetic switch means of Watanabe et al. in the switching configuration of Soma in order to reduce the operator force required to actuate the moving member.

Claim 2, Soma in view of Watanabe et al. as discussed for claim 1 previously, discloses the claimed invention except for the coils being arranged in a flat form and a moving member that connects to magnets that face the coils. It would have been obvious to one having ordinary skill in the art at the time the invention was made to

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interchange the location of the magnets and coils between the moving member and base section, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 6, Soma discloses that the actuator as claimed in claim 1, wherein the first holding member is a molded member defined by bending pressing a plate-like material [figure 1].

Claim 7, Soma discloses the actuator as claimed in claim 1, wherein the moving member includes a moving piece [52] that protrudes so that an operator can touch the moving piece; and the moving piece is slidably engaged with a shaft [41] formed in the first holding member.

Claim 32, Soma discloses an actuator, comprising a moving member [31] a first member [23] controlling the moving member to move within a predetermined range; a second member [24] controlling the first member to move within another predetermined range in a second direction, perpendicular to the first direction.

Soma fails to teach that the actuator uses a magnetic means to relay its position.

Watanabe et al. discloses a magnetic actuator with a set of magnets [10] and a set of coils [12], one set arranged in a flat form and the other set facing the one set; a moving member [70, 71] connected to one of the set of magnets and the set of coils and that the actuator moves one of the set of the coils and the set of magnets relatively to the other of the set of coils and the set of magnets.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the magnetic switch means of Watanabe et al. in the

switching configuration of Soma in order to reduce the operator force required to actuate the moving member.

Claim 33, Soma discloses an actuator, comprising a moving member [31] a first direction control member [23] controlling the moving member to move within a predetermined range in a first direction; and a second direction control member [24] controlling the first direction control member to move within a second predetermined range in a second direction, perpendicular to the first direction;

Watanabe et al. discloses a magnetic actuator with a set of magnets [10] and a set of coils [12] arranged in mutually facing relationship and movable relatively to each other; a moving member [70, 71] connected to a selected one of the set of magnets and the set of coils; and the actuator moving one of the set of the coils and the set of magnets relatively to the other of the set of coils and the set of magnets.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the magnetic switch means of Watanabe et al. in the switching configuration of Soma in order to reduce the operator force required to actuate the moving member.

Allowable Subject Matter

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Br



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